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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/608,127	06/30/2003	Boris Ginzburg	P-5755-US	2994

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PEARL COHEN ZEDEK LATZER, LLP
1500 BROADWAY, 12TH FLOOR
NEW YORK, NY 10036

EXAMINER	
SMITH, MARCUS	
ART UNIT	**PAPER NUMBER**
2619	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/608,127	GINZBURG ET AL.	
	Examiner	Art Unit	
	Marcus R. Smith	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *29 June 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *9,11-13,17-21 and 23-33* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *9,11-13,17-21 and 23-33* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 9,11-13,18-21, 23-29, and 32-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hansen et al. (US 7,158,759) in view of McFarland et al. (US 6,870,815).

with regard to claims 9, 21, and 29, teaches (figure 1):

A method comprising:

transmitting a channel switch request to a remote unit in communication with a media access controller on a first operating channel (column 4, lines 47-50);

switching a remote unit (22) in communication with a media access controller (processing module, 36) from a first operating channel to a second operating channel, wherein communication between said remote unit and said media access controller is substantially undisrupted (column 4, lines 42-50).

(other limitations to claim 29)

an access point (20) able to transmit data to a plurality of remote units (22-28) on a plurality of operating channels (column 3, 18-21, teaches all the stations communicate with the access points and lines 52-65, teaches that each Basic Service Set (BSS)

operates on one single channel. In figure 1, access point, 20, shows that it communicate both BSSs which means it can operate in two channels.); and

a plurality of remote units able to receive said data (column 3, 18-21),

Hansen et al. discloses all of the subject matter as described above except for wherein receiving said communication responsive to said channel switch request comprises receiving a positive reply or negative reply.

McFarland et al. teaches in figure 5, after the station receives a channel change frame, it sends its acknowledgement (step 502: column 14,lines 30-35) in order to avoid interference in the system and to inform the base station so it can synchronize the channel switch more quickly (column 1, lines 45-55).

Therefore it would have been obvious to one having ordinary skill in the art at the time invention was made to the remote unit send an acknowledgement (positive reply) as taught by McFarland et al. in the system of Hansen et al. in order to avoid interference in the system.

with regard to claims 11 and 23, teaches (figure 1):

wherein transmitting a channel switch request comprises transmitting a parameter relating to a mode of communication between said media access controller and said remote unit (column 4, lines 42-50: Indicating another channel is parameter of the mode of communication).

with regard to claims 12 and 24, teaches (figure 1):

wherein transmitting a channel switch request comprises transmitting a parameter relating to said second operating channel (column 4, lines 42-50: the packet will have an indicator (parameter) relating to the different (second) channel.).

with regard to claims 13 and 26, teaches (figure 1):

wherein transmitting a channel switch request comprises transmitting a parameter relating to a counter (column 4, lines 42-50: The examiner views time as a parameter relating to a counter.).

with regard to claims 18, 26, and 32, teaches (figure 1):

wherein switching said remote unit comprises switching based on a parameter relating to a load of remote units communicating with said media access controller on at least one of said first and second channels (column 6, lines 43-56: The interference can be from another (BSS) on same channel, which increases the amount of remote units on that first channel.).

with regard to claims 19 and 27, teaches (figure 6):

wherein switching comprises switching communication between said remote unit and said media access controller from said first channel to said second channel if a load remote units communicating with said media access controller on said first channel is greater than a load of remote units communicating with said media access controller on said second channel (column 9 lines 60-67 and column 10 lines 1-10: Figure 6, determines which channel to use by picking the outage receive signal strength level (RSSI) that is greater than the target RSSI. The examiner views the higher RSSI is also indicated the lowest channel interference. Therefore, the new channel will have a lower

interference level than first channel or the first channel has a higher interference level than the new channel.).

with regard to claims 20, 28, and 33, teaches (figure 1):

wherein switching said remote unit comprises switching based on a parameter (interference) relating to deterioration in a signal transmitted between said media access controller and said remote unit (column 4, lines 42-50).

3. Claims 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hansen et al. and McFarland et al. as applied to claim 9 above, and further in view of Jeoung (US 6,226,520).

Hansen et al. and McFarland et al. discloses all of the subject matter as described above except for receiving said communication responsive to said channel switch request comprises receiving a negative reply or comprises receiving a request for a different channel.

Jeoung teaches a method for a terminal and base station exchanging channel information. This method includes the base station sending changing request signal (Step 414) and the terminal can either sends call request with another traffic channel (404, then back to 403) or send a call request on that request traffic channel from base station (407, and 408) (column 3, lines 50-65 through column 4, lines 1-7). The terminal sending a call request from a channel different from the requested base station channel can be viewed as both a negative reply and a request for a different channel in order to use dynamic channel allocations, which require less engineering design, and makes the system more flexible to add or move terminals (column 1, lines 40-55).

Therefore it would have been obvious to one having ordinary skill in the art at the time invention was made to the remote unit sending different channel request after the change request signal has been sent by the base station as taught by Jeoung in the system of Hansen et al. and McFarland et al. in order to use dynamic channel allocations, which require less engineering design, and makes the system more flexible to add or move terminals.

4. Claims 30-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hansen et al. and McFarland et al. as applied to claim 29 above, and further in view of Mahany (US 5,960,344) see IDS (11/15/04).

Hansen et al. and McFarland et al. discloses all of the subject matter as described above except for wherein access point comprises a media access controller, a plurality of transceivers operably connected to said media access controller to transmit data to said remote units, and a processor to provide to said media access controller data for transmission to said remote units.

Mahany teaches access point (10) that a CPU processor (13) that controls the MAC processors (19, or 20) for the different radios (17, 18, viewed as transceivers) (figure 1, column 4, lines 48-65), which can simultaneously communicate with a plurality of remote units (column 9, lines 20-30) in order to increase reliability in the access point (column 4, lines 48-50).

Therefore it would have been obvious to one having ordinary skill in the art at the time invention was made to have that a CPU processor that controls the MAC

processors for the different radios as taught by Mahany in the system of Hansen et al. and McFarland et al. in order to increase reliability in the access point.

Response to Arguments

5. Applicant's arguments filed 6/29/07 have been fully considered but they are not persuasive. The examiner respectfully disagrees with applicant about McFarland's remote sending a acknowledgement is not a positive reply. The examiner standby his decision and views the acknowledgement packet as positive reply, since it affirms to the access point that station received channel change frame. Thus the combination of Hansen in view of McFarland does render claims 9, 21, and 29 obvious.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marcus R. Smith whose telephone number is 571 270 1096. The examiner can normally be reached on Mon-Fri. 7:30 am - 5:00 pm every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on 571 272-3126. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MRS 8/07/07

CHAU NGUYEN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600